Application/Control Number: 10/541,120

Art Unit: 2618

5.) On line 11 of claim 16, limitation "first mixer" has been amended to —first harmonic rejection mixer--.

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6.) On line 13 of claim \( \frac{1}{2}, \) limitation "sin" has been amended to --frequency-shifted cos oscillator signal--.

7.) On lines 15 and 16 of claim 16, limitation "second mixer" has been amended to --second harmonic rejection mixer--.

## Allowable Subject Matter

- 4. Claims 1-9 and 16 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

Consider claims 1-9, the best prior art of record found during examination of the present application, McCullagh et al. (U.S. Pub # 2002/002465 A1) discloses frequency synthesizer comprising a dual channel frequency/regenerative divider but fails to disclose, teach or suggest the claimed limitations such as a first removal means for receiving said output signal of said first mixer and removing undesired frequency signals from said output signal, providing said frequency-shifted cos oscillator signal as an output; the frequency-shifted cos oscillator signal output of said removal means also being connected to the input of said divider; and a second removal means for receiving said output signal of said second mixer and removing undesired frequency signals from said output signal, thus providing said frequency shifted sin oscillator signal as an output.